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This application claims priority to the parent application filed December 16, 1997, now U.S. Patent Registration No. 6,037,945, entitled, "Graphical Method for Modeling and Estimating Construction Costs."

**IN THE CLAIMS:**

Please replace claims 1, 6, 10, 15 and 21 with the following replacement claims, respectively:

1. (Amended) A method for modeling a chamber to enable estimation of chamber attributes, comprising the steps of:

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- (a) selecting a default volumetric polyhedron as an estimation polyhedron, said estimation polyhedron having a plurality of facets with each comprised of at least one estimation attribute including an area, wherein said estimation polyhedron estimates at least one of the group consisting of an area, volume and costs associated with at least one of said facets;
  - (b) morphing a selected facet of said plurality of facets of said estimation polyhedron into a morphed facet to approximate said chamber undergoing estimation;
  - (c) revising said at least one estimation attribute of said morphed facet and adjacent ones of said plurality of facets of said estimation polyhedron as modified by said morphing step in order to maintain a closed volume of said estimation polyhedron; and
  - (d) repeating said morphing and revising steps until said estimation polyhedron accurately depicts said chamber undergoing estimation.

6. (Amended) A method for graphically estimating attributes of a room, comprising the steps of:

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- (a) selecting a default volumetric polyhedron as an estimation polyhedron to approximate said attributes of said room, said estimation polyhedron having a plurality of facets with each comprised of at least one estimation attribute including an area, wherein said estimation polyhedron estimates at least one of the group consisting of an area, volume and costs associated with at least one of said facets;
  - (b) morphing one of said plurality of facets of said estimation polyhedron to approximate said room undergoing estimation;
  - (c) revising said at least one estimation attribute of said morphed facet and adjacent facets of said estimation polyhedron in order to maintain a closed volume of said estimation polyhedron;
  - (d) repeating said morphing and revising steps until said estimation polyhedron accurately depicts said room undergoing estimation; and
  - (e) listing said estimation attributes of said estimation polyhedron as said attributes of said room.

10. (Amended) A graphical method for estimating material requirements for a room within a structure, wherein said room is comprised of a plurality of planes, comprising:

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- (a) displaying a default surface polygon, said surface polygon forming one

plane of a plurality of planes of a volumetric estimation polyhedron for approximating said room, said plurality of planes each further having an estimation attribute assigned thereto, wherein said estimation polyhedron estimates at least one of the group consisting of an area, volume and costs associated with at least one of said facets;

(b) morphing said default surface polygon into a morphed polygon to approximate a plane of said room undergoing estimation;

(c) revising said estimation attribute of said morphed polygon and adjacent ones of said plurality of planes affected by said morphing step in order to maintain a closed volume of said estimation polyhedron;

(d) repeating said morphing and revising steps until said estimation polyhedron accurately approximates said room undergoing estimation; and

(e) converting said estimation attributes of said estimation polyhedron into said material requirements for said room within said structure.

15. (Amended) A computer-readable medium having computer-executable instructions for performing the steps comprising:

(a) displaying a default surface polygon, said surface polygon forming one plane of a plurality of planes of a volumetric estimation polyhedron for approximating said room, said plurality of planes each further having an estimation attribute assigned thereto, wherein said estimation polyhedron estimates at least one of the group consisting of an area, volume and costs associated with at least one of said facets;

(b) morphing said default surface polygon into a morphed polygon to

~~approximate a plane of said room undergoing estimation;~~

~~(c) revising said estimation attribute of said morphed polygon and adjacent ones of said plurality of planes affected by said morphing step in order to maintain a closed volume of said estimation polyhedron;~~

~~(d) repeating said morphing and revising steps until said estimation polyhedron accurately approximates said room undergoing estimation; and~~

~~(e) converting said estimation attributes of said estimation polyhedron into said material requirements for said room within said structure.~~

21. (Amended) A method for computerized modeling of a chamber to enable estimation of chamber attributes, comprising the steps of:

(a) selecting a default polyhedron as a volumetric estimation polyhedron, said estimation polyhedron having a plurality of vertices and facets each facet having at least one characteristic and comprised of at least one estimation attribute including an area, wherein said estimation polyhedron estimates at least one of the group consisting of an area, volume and costs associated with at least one of said facets;

(b) dragging at least one of said plurality of vertices to alter at least one of said characteristics of a facet of said estimation polyhedron to approximate said chamber undergoing estimation;

(c) recalculating said at least one estimation attribute of said altered facet and adjacent ones of said plurality of facets of said estimation polyhedron as modified by said altering step in order to maintain a closed volume of said estimation polyhedron; and

(d) repeating said altering and recalculating steps until said estimation

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polyhedron accurately depicts said chamber such that said calculated estimation attribute  
accurately estimates said chamber.

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